

AN
INAUGURAL DISSERTATION
ON
INSANITY:

SUBMITTED TO THE PUBLIC EXAMINATION OF THE TRUSTEES
OF THE COLLEGE OF PHYSICIANS AND SURGEONS,
IN THE STATE OF NEW-YORK,

SAMUEL BARD, M. D. PRESIDENT,

FOR THE DEGREE OF
DOCTOR OF MEDICINE,

ON THE 14TH DAY OF MAY, 1811.

BY THEODRIC ROMEYN BECK, A. M.

LICENTIATE IN MEDICINE OF THE MEDICAL SOCIETY OF THE
COUNTY OF NEW-YORK.

Canst thou not minister to a mind diseas'd ;
Pluck from the memory a rooted sorrow ;
Raze out the written troubles of the brain ;
And with some sweet oblivious antidote,
Cleanse the foul bosom of that perilous stuff,
Which weighs upon the heart ?

MACBETH.

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1811.

TO THE
REV. JOHN B. ROMEYN, D. D.

THIS DISSERTATION

IS MOST SINCERELY INSCRIBED,

WITH ALL THE FEELINGS

THAT GRATITUDE, ESTEEM, AND THE HIGHEST RESPECT

CAN INSPIRE,

BY HIS AFFECTIONATE NEPHEW,

THE AUTHOR.

TO

DAVID HOSACK, M.D. F. L. S.

PROFESSOR OF THE THEORY AND PRACTICE OF PHYSIC, AND

CLINICAL MEDICINE,

IN THE COLLEGE OF PHYSICIANS AND SURGEONS ;

FELLOW OF THE AMERICAN PHILOSOPHICAL SOCIETY,

AND OF THE

COLLEGE OF PHYSICIANS AT PHILADELPHIA ;

CORRESPONDING MEMBER OF THE MEDICAL SOCIETY OF

LONDON, &c. &c.

AS AN ACKNOWLEDGMENT

FOR HIS

MEDICAL INSTRUCTIONS, AND PERSONAL ATTENTION,

BY HIS

OBLIGED PUPIL AND FRIEND.

TO
DRS. WILLIAM M'CLELLAND,
AND
JAMES LOW,

OF ALBANY,

THIS DISSERTATION,
THE FIRST FRUITS OF AN EDUCATION COMMENCED
UNDER THEIR CARE,
IS RESPECTFULLY PRESENTED.

ERRATA.

Page 18, line 2, for "vessels of the brains," read "*vessels of the brain is.*"

21, line 8, for "are," read "*is.*"

line 11, for "are," read "*is.*"

1875/15

AN
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“OF the uncertainties of our present state,” says Dr. Johnson, “the most dreadful and alarming is, the uncertain continuance of reason.” The sage was himself a mournful example of what melancholy, and the fear of the loss of reason, could effect in a mind at once original, capacious, and powerful. Indeed, men of genius and talents seem, in many instances, to fall victims to the disease of insanity. It embittered the life of Cowper; shrouded in mental darkness the declining days of Swift; and prostrated the acute understanding of Vicq. D’Azyr. This spectacle of “human nature in ruins,” which, while it attacks the learned and wise, does not spare those engaged in other pursuits, has attracted the attention of medical men and philosophers in all ages and countries. Their examinations have thrown light on a mysterious subject, but much remains to be still unfolded. A compilation of the more important facts contained in their writings, relative to this disease, is all that can be expected from one whose opportunities of viewing the disease have been scanty, and whose information is derived chiefly from books.

The most common, and probably the most accurate division of the faculties and powers of the mind, is that into *understanding* and *will*. Under the former are included *perception*, or the impression made by external objects on the organs of sense, the nerves, and the brain, and conveyed, by means of consciousness, to the mind; *memory*, comprehending both a power of retaining knowledge, and of recalling it to our thoughts when occasion requires; *judgment* and *reason*, or the faculty of discerning the relation of one thought or proposition with another, and drawing inferences from them; and *imagination*, whose province it is to make a selection of qualities and circumstances from various sources, and by combining and disposing them, to form a new creation of its own. To these may be added, *attention*, *abstraction*, and *conception*. The will comprehends the active powers, as the *passions* and *affections*. In most, if not in all the operations of the mind, both these faculties concur. Perception is one that arrives to maturity, even in infancy. The impressions of external objects are the first which occur to the view, and consequently claim the greatest share of regard. The rest are developed and improved with advancing years. Memory, assisted by attention*, treasures up the knowledge which we have acquired; whilst reason, in a well governed mind, always exercises a commanding sway over the imagination and passions, regulating the excursions of the one, and restraining the excesses of the other†.

* "Attention to things external is properly called *observation*; and attention to the subjects of our consciousness, *reflection*."—REID.

† Vide Reid and Stewart.

These faculties are, however, far from being uniform in all men. They are influenced, amongst a variety of other causes, by early education, habit, improper association of ideas, and differences in the physical constitution. Through the varied operation of these agents, our actions in life are guided, and according as they differ from the standard which the general sense of mankind has adopted, are regarded as deviations from sanity or virtue. The diseases of the mind included under the former are numerous, and have been called by various names. It will probably simplify our remarks on them, by sketching those of the more important faculties separately. *Perception* is liable to injury, both in itself and in its immediate organs. The senses may be affected in numberless ways, by bodily disease. The power itself becomes erroneous, from ignorance, and other subordinate causes, as rashness and credulity. Objects are also at different times presented in too great rapidity, or too slowly, producing the different states of *vertigo* and *emui*. To this class may also be referred the belief in the appearance of apparitions*. It appears to be altogether destroyed, or at least very seldom brought into operation, in fatuity or idiotism, in which "no accurate representation of any external object, and no abstract thought or reflection ever occurs†." The *memory* may be injured by various

* Vide an interesting paper "on Apparitions, by John Alderson, M.D." in Edin. Med. and Surg. Journal, vol. vi. p. 287. The author discusses this diseased state of perception, and establishes the difference between it, and læsions of other faculties, in a rational and conclusive manner.

† Crichton on Mental Derangement, vol. 1. p. 314.

corporeal agents, for which I need only refer to the writings of practical physicians. It decays in old age, and among the mental causes which affect it, are to be included inattention and over-exertion. It is a remarkable fact, that persons advanced in life remember the scenes of youth much better than the transactions of later years. The same thing has occurred in cases of old, incurable lunatics*. The *judgment* and *reason*, the peculiar birthright of man, become erroneous, defective, or are totally destroyed. Prejudice, passion, ignorance, and all the agents which affect the other faculties, assist in weakening it. Among the disorders of the *imagination*, may be mentioned reverie, or the illusion of waking dreams, and too great sensibility. The latter is the fruitful source of ills, producing enthusiasm, fastidious refinement, and inattention to the necessary business of life. The consequences of ill-regulated *passions* need not to be mentioned. The other powers are subject to similar imperfections. All of them are more or less disordered in mental derangement, but which of them primarily, is difficult to be determined.

An analogy has been supposed by some to exist between the states of dreaming and insanity, and the opinion has some foundation; particularly if Prof. Stewart's theory be correct, viz. that the power of the will is suspended during sleep†. Dreams, according to him, vary with our bodily sensations, the prevailing temper of mind, and our habits of association, when awake. The distinction of Haslam, which is

* Haslam on Madness, &c. 2d edit. p. 61.

† It will, however, be difficult to account for somnambulism, and talking in sleep, on this supposition.

borrowed from Hartley, that in madness the delusion is conveyed principally through the ear, while in dreaming it is optical, will hardly stand the test of fact. A remarkable instance to the contrary is related by Dr. Beattie, in his Dissertation on Dreaming.

From the foregoing imperfect sketch of the "Anatomy of the mind," it will be seen that it is subject to disease as well as the body. To arrange the various kinds according to their proper gradations, is almost impossible in the present imperfect state of this science. The following comprehends most of those concerning which we have information. Pleasant dreams*, unpleasant dreams, somnambulism, vigilia, erroneusness of judgment in children, dotage of old

* Although it will not be denied, that unpleasant dreams are a state of disease, yet many may not be disposed to allow the same concerning pleasant ones. Several circumstances, however, tend to substantiate this assertion, such as the necessity of rest to the mind, as well as the body, the disordered state of the imagination during sleep, unswayed by judgment, and the fact of persons, who are in habits of thinking, and thus causing over-activity of the mind, dreaming much, while the contrary description of persons, as the labourer, do not. Locke, (Essay, book 2. chap. 1.) mentions the case of a gentleman who never dreamt, till he had a fever in the 25th year of his age. Dr. Beattie, (Dissert. on Dreaming,) mentions a person who never dreamt but when his health was disordered. Medical men have made similar observations. "Observamus somnum, qui ante mediam noctem capitur, plus incrementi viribus addere, quam qui eam subsequitur. Ratio hæc esse videtur, quia, homines tunc temporis profundiori somno merguntur." Hoffman. Opera Fol. Tom. 1. p. 126. An. 1748. Gregory, (Conspectus, vol. 1. p. 209.) remarks, "Qui sanissimi altum dormiunt, iis neque motus voluntarius est, neque sensus externus, neque interni, *si quis fuerit*, ulla memoria."

age, reverie, too great liveliness of imagination, disordered association of ideas, frequent recurrence of the same train of thought, loss of memory, nervous affections, violent passions, hypochondriasis, hysteria, epilepsy, madness, melancholy, fatuity, together with delirium, and other affections attendant on acute distempers. Many of these, if not all, are connected with diseases of the body.



HISTORY OF THE DISEASE:

IN the earliest medical writings of the ancients, insanity is divided into melancholia and mania. Although Hippocrates has left us no particular treatise on this subject, yet it is clearly deducible from various parts of his works, that he considered them as different forms of disease*. Aretæus, the first writer extant who treats professedly on diseases of the mind, adopts this distinction, but observes, that melancholy appears to him to be the commencement, and constitutes part of mania†; and succeeding writers, with hardly an exception, have followed this arrangement, until within the last twenty years. Several systems have been offered to the world‡, in which insanity is

* Compare Aphorisms, Sect. 3. Aphor. 20. and 22. and Sect. 6. Aphor. 23. with Lib. De Morbo Sacro, Sect. 3. p. 92. (Ed. Fœsli.)

† “Mihi profecto melancholia *μῆνις*, initium atque pars esse videtur.” Aretæus De Caus Diut. affect. lib. 1. p. 29. Ed. Boerhaave, 1735. Cælius Aurelianus observes, that *Themison* and his disciples were of the same opinion. De Morb. Chron. lib. 1. 340. Ed. Amman.

‡ By Drs. Arnold, Crichton, and Pinel.

divided into a number of species ; but they have generally been found as useless in practice, as they are difficult to be distinguished in theory. The idea of their being one and the same disease, in different forms, according to the temperament and constitution of the patient, seems not unreasonable. The facts of the very frequent conversion of one into the other ; of numbers whose lives are passed between furious and melancholic paroxysms, and under both, retaining the same set of ideas* ; and of the same remedies, with little variation, being found useful for both, materially strengthen this supposition. Mr. Haslam, whose opportunities of viewing the disease in all its varied forms, have been very great, observes, “ In both there is equal derangement, and on dissection, the state of the brain does not show any appearances peculiar to melancholia†.” As, however, the symptoms which are immediately presented to our view appear so diametrically opposite, it will be proper to retain the distinction. Insanity may be divided into *melancholy*, *mania*, and *idiotism*. The first is characterised by an anxious look, love of solitude, and excess of fear. The second by hurried action, loquacity, and furious raving. The last, although frequently the termination of the previous ones, is in many instances an idiopathic disease‡. Its peculiar character has been already noticed.

Various theories have been proposed, as it respects the affection of the mind in these stages. In melancholy it is invariably fixed on a single train of

* Haslam on Madness, p. 33.

† Haslam, p. 37.

‡ As in the Cretins of Switzerland.

thought*: while in mania, it is roving with rapidity from one subject to another. By an application of the principles already laid down, the difficulty of arriving at any certainty on this point will be immediately perceived. Maniacs, in many instances, have false perceptions; that is, they assert they have seen objects which it is impossible could have appeared to them. But this defect is not universal. In some the idea is evidently derived from former impressions, and no trace can be perceived of diseased perception. The reasoning faculty also, though impaired, is not destroyed. The patient argues correctly from false premises. We are ignorant of the train of thought passing in his mind, and judge only by the incoherence of his conversation, which may be owing to the rapidity of his ideas, and his expressing only part of them. The ideas may be represented either with *unnatural rapidity*, *unnatural association*, or *unnatural vividness*†. The passions appear occasionally to be the seat of insanity, unaccompanied with defect of judgment and imagination. The whole disease in this case appears to consist in a preternatural susceptibility to emotions. It may be said, that these different læsions of the faculties of the mind certainly prove the existence of different diseases; but the objection is at once repelled by the fact of a single patient at various times passing through all the gradations, from furious phrenzy to complete fatuity.

* “Est autem (in melancholia) animi angor in una cogitatione defixus.” Aretæus ut antea. Dr. Ferriar’s definition of melancholy is, “intensity of idea,” *granting an object exclusive attention*.

† London Med. Review, vol. 1. p. 46.

The following is the most correct explanation, (though liable to objection,) which the author has met with, and is one that will elucidate a great number of the phænomena that occur. “ The true relation between the two general forms of insanity may be stated to consist in *abstraction*, and in *vivid imagination*. The one will comprehend that state, where the mind separates the combinations which are presented to it, and fixes its attention exclusively upon one single object. The other combines the different objects and various sensations, creates new ones, and mistakes conceptions, the recollection of past perceptions for real existences.*”

A similar diversity of opinion has taken place, (though not in so great a degree,) as to its seat in the body. Hippocrates supposed the brain to be affected in two ways, by the bile and pituita; the heating and cooling principle. The one causing mania, and the other melancholy†. Aurelianus supposed the head to be disordered in the former, and the stomach in the latter‡. The moderns in general refer it to the brain, allowing, however, in some instances, that the stomach is the primary organ diseased. A kind of

* Edinburgh Review, vol. 2. p. 169.

† “ At cerebri corruptio ex pituita et bile oritur, utrumque autem hoc modo dignosces. Qui ex pituita quidem insaniunt, quieti sunt, neque vociferantur, neque tumultuantur; qui vero ex bile, clamosi, maligni et minime quieti, semper aliquid intempestivum faciunt. Ex his igitur causis continuo insaniunt.” De Morbo Sacro Sect. 3. p. 92. line 36. (Ed. Foesii)

‡ “ Differt autem, siquidem in ista (melancholia) principaliter stomachus patitur, in furiosis vero caput.” Cæl. Aurelianus. ut antea.

chronic inflammation or plethora of the vessels of the brains, supposed by many to occur. In what the other changes from health consist, it is difficult to explain.

The *diagnosis*, or distinguishing symptom of insanity, has been universally stated to be "*delirium sine febre*." The correctness of this is destroyed, by the fact, of a patient during the hysteric paroxysms being in the same situation.

The difficulty of giving a correct *definition*, has been of late unwillingly acknowledged. "There is, indeed, a double difficulty; the definition ought to comprehend the aberrations of the lunatic, and fix the standard of the practitioner. But it may be assumed, that sound mind and insanity stand in the same predicament, and are opposed to each other in the same manner as right and wrong, and as truth to the lie*."



SYMPTOMS.

IN many instances, an attack of insanity is preceded by pain in the head, throbbing of the arteries, and even giddiness; tightness about the region of the abdomen, want of appetite, peculiar sensation in the intestines, costiveness, loss of sleep. All the patients agree that they feel confused from the sudden and rapid intrusion of unconnected thoughts.

They who are attacked with *mania* become uneasy; are unable to confine their attention; are loquacious; walk with a quick and hurried step, and stop suddenly. They express their opinions with great fervency and extravagance, and are highly impatient

* Haslam, p. 37.

of reproof. Some laugh, cry, and sing, by turns. The eyes protrude, and are often glistening. The cheeks are flushed. A relaxation of the integuments of the occiput, together with contraction of the iris, occur in some cases. A very vigorous action of both body and mind takes place, particularly great muscular strength. Some fancy themselves kings, prophets, &c. Some feel an ungovernable inclination to acts of fury and violence, and maim and murder those whom they can approach. They become suspicious of plots. This fury increases, until at last confinement is necessary ; while in that situation they are observed to continue a particular action for a length of time, such as shaking their chains, or beating with their feet. They readily yield to superior force, and a stern countenance.

The *melancholic* attack, on the other hand, commences with a gloomy, anxious countenance ; little disposition to speak ; avoidance of company, frequently keeping the eye “ bent on vacuity,” for hours. The patient often bursts into tears ; imagines he has committed some heinous crime, and not unfrequently finishes his hated existence.

The maniac and melancholic, however, do not always remain in these situations ; the paroxysms abate, and are succeeded by calmness, and a certain degree of rationality. This has been called the *lucid interval*. “ I have no where,” says Pinel, “ met, excepting in romances, with fonder husbands, more affectionate parents, more impassioned lovers, *more pure and exalted patriots*, than in the lunatic asylum, during the intervals of calmness and reason*.” Its duration is, how-

* Pinel on Insanity, translated by Dr. Davis, p. 16.

ever, very uncertain, and ought to have no weight with the physician, as to preventing watchfulness, and pursuing the proper method of cure. The exhaustion that follows the paroxysm is highly dangerous, and must be carefully guarded against*.

Madmen are said to possess the *power of resisting cold*; but this is denied by late writers. Mr. Haslam observes, that they are very subject to mortification of the toes from exposure to inclement weather†. Those that are permitted to walk about are always found near the fire in winter. Probably the great engagement of the mind causes insensibility during the paroxysm. They are also said to possess the *power of resisting hunger*. Many refuse food, from an apprehension of being poisoned. In some instances the fasting has been prolonged to fourteen days‡. Mr. Pinel gives a melancholy account of the mortality in the Asylums of France, during the storms of the revolution, when the daily allowance of bread was reduced§.

Of the organs of sense the ear is most affected; many become deaf, but very few blind||. The majority of patients grow worse from lying in the recumbent posture. Of 265 lunatics, in Bethlem hospital, who were examined, 205 were swarthy, with dark or black

* Haslam, Pinel, and Ferriar. "Whoever," says the latter, "would gain a knowledge of the symptoms of madness from books, more particularly than that afforded by Aretæus, must consult *Shakspeare*." In proof of this I need only refer to the tragedies of *Lear*, *Macbeth*, and *Hamlet*.

† P. 84.

‡ Annals of Medicine, vol. 5. p. 383.

§ Pinel, p. 33. and 209.

|| Haslam, p. 67.

hair, and 60 with fair skin, and light, brown, and red haired*. It is a remark made by Hoffman, and confirmed by experience, that maniacs are not subject to epidemics. Dr. Hosack informs me, that none were attacked with yellow fever during its prevalence in this city. Other diseases are also removed by its attack†.

The appearance of *idiots* are marked by looks devoid of animation, and motion slow and mechanical. The senses are imperfectly developed, and the train of ideas, (if any exist,) are very slow and feeble. Many of them, after remaining in this state for years, are attacked with paroxysms of active mania, and the symptom is favourable, since in some cases it is succeeded by a return of reason‡. Congenite idiotism is found in the Vallais in Switzerland, in Savoy, in the island of Sumatra, in Chinese Tartary, near the great wall, as observed by Sir George Staunton§. In most cases they are affected with goitre. A diminution of the size of the cranium, as well as of the brain, is also said to occur||. This interesting subject

* Haslam, p. 83. "Novimus enim hirsutos, nigroque colore et habitu tenues, multo facilius quam candidos et crassiores, melancholia corripiti." Alex. Trallian, voi. 1. p. 84. (Ed. Haller, 1772.)

† Vide Mead's Med. Precepts, and Ferriar on the Conversion of Diseases.

‡ Pinel, p. 168.

§ Coxe's Travels in Switzerland, 4th edit. vol. 1. p. 420. et Seq.

|| In a Lecture on Physiology, delivered at Paris, by Dr. Gall, Jan. 15, 1808, he stated as his opinion, that the power of intelligence was in proportion to the developement of the brain. Thus stupid animals have very little brain, sagacious

is further elucidated in Fodéré "Essai sur le Goitre et Cretenisme," and in Dr. Reeve's "Account of Cretenism," in Edin. Med. & Surg. Journal, vol. 5. p. 31.

CAUSES.

THE remote causes of insanity are either bodily or mental.

Bodily causes. Repeated intoxication; blows, and other injuries on the head; fever, particularly when attended with delirium; cutaneous eruptions repelled; suppression of periodical or occasional discharges and secretions; excessive evacuations; mercury largely and injudiciously administered*; paralytic affections; great heat of climate; *coup de soleil*; changes of the moon†; influence of the seasons, particularly summer‡; in England, the *month of November*; hereditary predisposition; melancholic, and probably the sanguineous temperament; manufactures§.

ones more, none so much as man; and among men idiots are remarkable for smallness of the head, and paucity of brain. He exhibited the heads of several idiots in proof of this position. Literary Panorama, vol. 4. p. 164.

* Haslam.

† Hence called lunatics. This cause, although denied by Haslam and others to be one, has the testimony of many physicians in favour of it, and among the rest may be named Dr. Balfour in his Theory of Sol Lunar Influence. Vide Asiatic Researches, vol. 8th.

‡ Pinel.

§ According to the Report of the Committee of the House of Commons, in 1807, Lancashire has 272 lunatics,

Mental causes. The principal source of these is, errors in *early education*; pursuing a system which injures the body, gives free scope to the passions, and does not discipline the intellect. It would be a highly interesting speculation, to consider, in connexion with this subject, the differences in the moral and physical constitution of man, produced by successive changes from barbarism to civilization; together with the influence of increase of wealth and luxury. National character deserves also to be noticed. England, Switzerland, and Spain, have the greatest number of lunatics, in proportion to their population, of any countries in Europe. In France there were but few, until the Revolution*. The frequent and uncurbed indulgence of any violent passions or emotions ~~are~~^{is} the most common mental causes. Gray has delineated their effects with graphic accuracy.—

These shall the fury passions tear,
The *vultures* of the mind,
Disdainful *anger*, pallid *fear*,
And *shame* that skulks behind;
Or pining *love* shall waste their youth,
Or *jealousy* with rankling tooth,
That inly gnaws the secret heart,
And *envy* wan, and faded *care*,
Grim visag'd comfortless *despair*,
And *sorrow's* piercing dart.

out of a population of 670,000, while the counties of Cambridge, Huntingdon, Hertford, and Essex, have 7, out of 444,000. The East Riding of Yorkshire three; North Riding, twenty-three; while the West Riding has 424. Literary Panorama, vol. 2. p. 1259.

* Arnold on Insanity, vol. 1. sect. 2.

Ambition this shall tempt to rise,
Then whirl the wretch from high,
To bitter scorn a sacrifice,
And grinning infamy.

Avarice, domestic misfortunes, commercial speculations*, political contests†, *enthusiastic patriotism*‡, mistaken ideas of religion causing either enthusiasm or superstition, and sudden joy, may also be mentioned. Minds destitute of order in their intellectual operations, are much predisposed to insanity.

Of 113 madmen confined at Bicetre, in 1795, Mr. Pinel found, that 34 were reduced to that state by domestic misfortunes, 24 by disappointments in love, 30 by events connected with the Revolution, and 25 by religious fanaticism. The subjects were principally monks, many artists, painters, and musicians, versifiers, “who have all the melancholy madness of poetry, without its inspiration;” and a great number of *advocates* and *attornies*. No instances of a single physician, chemist, or mathematician§.

Of the *Proximate Cause* we know nothing.

DISSECTIONS.

IT is well observed by Dr. Arnold, that in no disease are the appearances on dissection more fallacious, as to guiding us in our opinion of the seat and cause of it, than in insanity. According to him

* Willan.

† Rush.

‡ Pinel, p. 15.

§ Pinel, p. 113, 114

this must be attributed to the danger of mistaking effects for causes. The following are among the more remarkable appearances of the brain, which occurred in the dissections of Morgagni, Greding*, and Haslam. The dura and pia mater diseased, and water between them. The consistence of the brain in most instances soft, in some cases quite elastic†. Pineal gland diseased. Water in the ventricles. Hydatids on the plexus choroides. Vessels of the brain distended, and the brain itself showing marks of inflammation or congestion. In slight cases, nothing particular was observed, except a determination of blood. Nothing important was observed in the viscera. M. Prost, a physician in Paris, places insanity in the stomach and bowels, as he has found the intestines and gall bladder diseased in several dissections of maniacs. Mr. Pinel supposes, that in the majority of cases there is no organic læsion of the brain, on account of the success which attended the exclusive use of moral management‡.

PROGNOSIS.

Sex. By a reference to the Appendix, it will be seen, that in England females are more liable to this complaint than men; whilst on the continent the contrary takes place||.

* Medical Aphorisms, translated by Crichton.

† Haslam, chap. 3.

‡ Edin. Med. & Surg. Journal, vol. 1. p. 455.

§ Pinel, p. 5.

|| "*Viri sane et furore et melancholia corripuntur; rarius autem quam viri, sed deterius mulieres furis agitantur.*"

Age. By a similar examination it appears, that the number of patients admitted at Bethlem and Bicetre, between the age of 30 and 40, were greater, than between any other ten years. This is probably owing to the circumstances of misfortunes affecting the mind more sensibly at that time of life, when a family is generally to be provided for. Intoxication is also readily induced at that age, from similar causes; and the hereditary predisposition, (if any exists,) will make its appearance. Instances of insane children are rare. Mr. Haslam relates three cases, of the respective ages of three, seven, and ten years*.

State of Disease. Of 100 patients in a furious state, 62 were cured: of 100 melancholic, only 27†. If the disease arise from physical causes, the prognosis is more favourable than when from moral ones; thus, of 80 cases of puerperal mania, 50 recovered‡. The chance of cure is diminished in proportion to the length of time that the disease has remained. The frequent alternations of raving and melancholy madness are unfavourable, as are also those in which the temper is more affected than the understanding§. Heaviness after the paroxysm, hæmoptisis and cutaneous eruptions, are favourable symptoms. Relapses are frequent from affections of the mind, or error in diet and regimen. Madness, of the hereditary or religious

Ætas, quæ prope statum est, et ipse status huic malo subji-
ciuntur." Aretæus, Lib. 1. De Caus. Morb. Diutur. p. 30.

* Haslam, chap. 4.

† Haslam, p. 257.

‡ Haslam, p. 247.

§ Ferriar's Essay on Insanity, in Med. Hist. & Reflect.
vol. 2.

kinds ; or complicated with epilepsy and paralysis, or gradually declining into idiotism, is generally incurable. In addition to the statements in the appendix, it may be added, that Dr. Willis deposed, that of patients committed to him within three months after the attack, nine out of ten recovered ; and Dr. Arnold states, that in his own private establishment, and the Leicester lunatic asylum, two thirds of those admitted are cured*. Dr. Rush is said to have cured twelve out of thirteen ; and of recent cases cures four out of five†.

Termination. It is an observation of Celsus‡, and confirmed by succeeding writers, that insanity does not prevent patients from arriving at old age. Dr. Heberden attributes this to the parts of the brain, which are subservient to animal life, being distinct from those which are essential to the use of reason§. Lunatics are very subject to diarrhea. The diseases which generally close their unhappy existence are, apoplexy, palsy, phthisis, atrophy, and hydrothorax||.

CURE.

AS the causes are of different kinds, so it is proper that the cure should be appropriate to each. For the removal of insanity arising from mental causes, a method is at present pursued, styled in general,

MORAL MANAGEMENT. This consists in removing

* Quarterly Review, vol. 2. p. 160.

† This fact is communicated to the author by Prof. J. A. Smith.

‡ De Medicina, lib. 1. sect. 18. " Ut vitam non impediat."

§ Heberden's Med. Commentaries, p. 277.

|| Greding.

patients from their residence to some proper asylum ; and for this purpose, a calm retreat in the country is to be preferred : for it is found that continuance at home aggravates the disease, as the improper association of ideas cannot be destroyed. A system of humane vigilance is adopted. Coercion, by blows, stripes, and chains, although sanctioned by the authority of Celsus and Cullen, is now justly laid aside. The rules most proper to be observed are the following : Convince the lunatics that the power of the physician and keeper is absolute ; have humane attendants, who shall act as servants to them ; never threaten but execute ; offer no indignities to them, as they have a high sense of honour ; punish disobedience peremptorily, in the presence of the other maniacs : if unruly, forbid them the company of others, use the strait waistcoat, confine them in a dark and quiet room, order spare diet, and if danger is apprehended, apply metallic manacles to their hands and feet, as they are found not to injure by friction so much as linen or cotton ; tolerate noisy ejaculations ; strictly exclude visitors ; let their fears and resentments be soothed without unnecessary opposition ; adopt a system of regularity ; make them rise, take exercise and food at stated times. The diet ought to be light, and easy of digestion, but never too low. When convalescent, allow limited liberty ; introduce entertaining books and conversation, exhilarating music, employment of body in agricultural pursuits, as is the case in the hospitals of York and Saragossa ; and admit friends under proper restrictions. It will also be proper to forbid their returning home too soon. By thus acting, the patient will “ minister to himself.”

REMEDIES. A comparison of the ancients with the moderns in this particular, will fully prove, that but few important improvements have been made by the latter. A general abstract of the practice of the most distinguished of each, is all that the length of this Dissertation will allow. Aretæus recommends moderate venæsection; to be repeated, if the patient is plethoric, purging with black hellebore, and in some cases emetics; nourishing diet. If arising from suppressed discharges, more active remedies are advised. He also mentions bathing in warm mineral waters, friction with oil, and purges exhibited occasionally for a length of time*. Trallian has similar directions; he prefers topical bleeding, as it does not debilitate so much as venæsection. He also recommends the warm bath highly, and condemns the use of white hellebore, as a vomit, being too violent†. It is remarkable, that in the writings of the ancients, no traces are to be found of their considering hellebore as a specific, although this is the received opinion. It has probably arisen from the poet's enlarging on its virtues in a metaphorical manner. Aurelianus recommends shaving of the head, and the application of sinapisms‡. Celsus speaks in high terms of the use of cold water to the head§. Poppies applied to the head were advised by some, but it does not appear that they were generally used.

* Aretæus De Curat. Diut. Affect. lib. 1. chap. 5.

† Trallian, lib. 1. chap. 17.

‡ Aurelianus, De Morb. Chron. lib. 1. chap. 5 and 6. He rejects a remedy that had been advised by some, and gives the following reason: "Quippe cum sit possibile ex consuetudine perficere sanitatem." P. 341.

§ Celsus, lib. 3. sect. 18.

Dr. Harvey's method of cure was by repeated bleedings, mild purges, and chalybeates†. Dr. Thomas Willis speaks in high terms of iron in melancholy‡. The practice of Hoffman is similar to the above. Dr. Mead, besides these remedies, advises attention to the evacuation by urine in cases of madness, and directs nitre to be used. He found blisters hurtful in most cases, and preferred setons in the neck. He also gave medicines to promote perspiration; ordered frequent use of the cold bath; and in some instances prescribed anodynes§.

Among the practitioners of the last century and the present day, the method of cure of the following deserves notice. Dr. *Ferriar* found single emetics at the commencement of the disease useful, but objects to nauseating doses of tartrate of antimony frequently repeated, and gives cautions similar to the above named with respect to venæsection. He speaks in very high terms of the strict antiphlogistic treatment in cases arising from intemperance, but has found camphor, digitalis, and opium, even in large quantities, of no benefit. He uses the warm bath in mania, and the cold, together with bark and wine, in melancholy, with great advantage. Setons and blisters, were found beneficial. Under the head of purges, he prefers calomel, but in several cases where he gave it so as to cause salivation, it pro-

† “De se testatur, quod aliquot maniacos per venæsectionem, bis vel ter repetitas, lenes purgationes et medicamenta antihypochondriaca mineralia, intra sex septimanas feliciter curaverit.” De Vanitatibus, &c. Medicorum; In Acta Eruditorum, 1701. p. 438.

‡ “De Anima Brutorum” in Opera, 1695. vol. 2. p. 278.

§ Mead's Medical Precepts and Cautions.

duced no sensible effect on the disease*. Mr. *Haslam* prefers blood drawn from the head by cupping, to any other method. He has found cathartics of great service. Jalap and senna are principally used. He found emetics and cold baths hurtful, in many cases inducing paralytic affections; and opium and setons useless. Blisters applied to the legs were advantageous, in some instances†. *Prof. Pinel* speaks slightly of all kind of remedies, as he considers the disease to be curable by moral management alone. He recommends however a few drams of sulphate of magnesia, as an excellent preventive of approaching paroxysms‡. Dr. *Chiarugi*, of Florence, speaks in very high terms, of friction with opium ointment; it produced calmness in every case, and in some it affected a cure§. Dr. *Cox* uses the rotatory swing with similar success. Dr. *Rush* recommends venæsection to a large extent; mercury given so as to cause salivation; warm and cold bath; blisters to the ancles; together with fresh air and gentle exercise||. The famous Dr. *Francis Willis*, who attended the present king of England, and the queen of Portugal, during their insanity, is said to have prefer-

* Medical Histories and Reflections, 1810. vol. 1. 214; and vol. 2. p. 107. In the *Nova Acta Curios.* vol. 1. p. 346. is related a case, cured by mercurial friction in a month, after all previous remedies had failed.

† *Haslam*, chap. 8. Dr. *Hosack* informs me, that he has found blisters applied to the head, and continued for a length of time, of great use.

‡ Page 44.

§ *Annals of Medicine*, vol. 3. p. 105.

|| *Med. Inquiries and Observations*, 3d edit. vol. 4. p. 416.

& *Coxe's Med. Museum*, vol. 4. p. 136.

red emetics. Opium he thought did harm; and when narcotics were required, he employed hyoscyamus. Blisters on the neck he found hurtful. Digitalis was considered proper in some cases, as was also the warm bath*. In the case of George III. which he attributed to weighty business, severe exercise, and too great abstemiousness; the bark, after a little calomel and a cathartic, appeared to be productive of very decided advantage†.

NOTE.—The Harvey, noticed above, was Dr. Gideon Harvey, physician to Charles II. in his exile. He flourished at the end of the seventeenth century.

MEDICAL JURISPRUDENCE AND POLICE.

THE Medical Jurisprudence of Lunatics may be considered in two points of view. 1. The security of the public, and 2. The proper treatment of the patients.

To effect the first, it becomes absolutely necessary that they should be confined in some convenient place, in order to prevent the commission of crimes, to which they are all more or less liable. The law has humanely forbidden the exercise of punishment on them, since its ends cannot be answered. “Society,” (says Dr. Johnstone, and the sentiment is applauded by all good men,) “may obtain an adequate protection by the confinement of maniacs, without blood.” Cases frequently occur, where medical men

* Edin. Med. & Surg. Journal, vol. 4. p. 195.

† Quarterly Review, vol. 2. p. 168.

are called on to decide before a jury respecting the state of a person's mind, who has committed a crime, or made an unjust will. In both, it is of importance, that they should have formed proper opinions on the several symptoms of this disease, for in none are men more apt to err, than on the apparent sanity of a maniac. The term *lucid interval* has been applied to this state. In matters of law, the following observation of Mr. Haslam is certainly the most proper to guide us: "I should define a *lucid interval* to be a complete recovery of the patient's intellects, ascertained by repeated examinations of his conversation, and by constant observation of his conduct, for a time sufficient to form a correct judgment*." Dr. Johnstone notices a discordance in the laws of England, which is highly disgraceful to a civilized nation. In matters of property, the law forbids the restoration of it, until the return of perfect reason and intellect, while merely appearances of sanity during the moment of committing a crime, are sufficient to condemn the maniac, although insane both before and after†. Whether this inhuman statute has force in our own country, the writer is unable to learn.‡

2. *The Treatment of Patients.* Different methods have been pursued for this purpose, according to the

* Haslam, p. 46.

† Medical Jurisprudence of Madness, by J. Johnstone, M. D. 1800.

‡ Dr. Mahon, in his Legal Medicine, observes, that in cases of maniacs committing crimes, we should follow the maxim of enlightened jurisconsults. "Semel furiosus, semper presumitur furiosus, et contrarium tenenti incumbit onus probandi sanam mentem." Lond. Med. & Phys. Journ. vol. 9. p. 72.

inclination of relatives, or the laws of the country. Thus criminal lunatics have been [confined in jails, but this is evidently incompatible with proper attendance, and the safety of the other prisoners. Nor is the plan of confinement in private mad-houses, free from objection. Even if their superintendants be humane, the accommodations are generally insufficient and inadequate for public security, since the instances of escape from them are numerous. But more important charges may be brought against them. They may be made, (and in Great-Britain are made,) the ~~living~~ tombs of the victims of avarice and revenge. In them the most dreadful cruelty may be exercised with impunity. To feel the justice of these censures, it is only necessary for any person to ask himself the question, What would be his feelings, were a relative or friend secluded in these abodes, through the malice of others? If private mad-houses are tolerated, they ought certainly to be watched with a jealous eye. The establishment of asylums, in various central parts of a country, exclusively appropriated to this purpose, under the particular superintendence of government, and open to the watchful inspection of proper commissioners, together with the advice and care of able physicians and humane keepers, is the plan which is open to the least objection, and is one which promises the happiest results as to the recovery and restoration of the insane to society*.

* Much interesting information on this subject will be found in the Report of the Committee of the house of Commons, and Prof. Duncan's paper on the State of Lunatics in Great-Britain, in *Edin. Med. & Surg. Journal*, vol. 4. p. 129, and 144.

APPENDIX.

THE following account of Lunatic Asylums in Europe and America, may probably be interesting to the reader.

ENGLAND.

THE largest establishments in England which are appropriated to the confinement of Lunatics are, St. Luke's and Bethlem Hospitals in London.

St. Luke's Hospital. This institution was founded in 1732, and opened in 1737. It then admitted 110 patients. On account of the increasing number of applicants, a new building, larger, and more commodious, was erected, in 1787, which accommodates 300 patients, divided into two lists or classes; 200 on the curable, and 100 on the incurable list. The latter are received according to the order in which they have been discharged as uncured from the Hospital. Of these there are at present (1810) more than 600 waiting for admission. Idiots are not admitted. Among its officers are, the Duke of Leeds President, and Dr. S. F. Simmons, Physician. The patients admitted from July 30, 1751, to April 21, 1809, amount to 9042, of which those discharged as incurable, and received again, amount to 323. Of these,

| | | | | |
|--|---|---|---|-------------|
| Patients remaining, April 21st. 1809, | - | - | - | 199 |
| discharged cured, | - | - | - | 3915 |
| uncured, | - | - | - | 3101 |
| as idiots, | - | - | - | 783 |
| dead, | - | - | - | 748 |
| taken away by friends, and discharged from various causes, | - | - | - | 296 |
| | | | | <u>9042</u> |

| | | | | |
|--|---|---|---|------------|
| Patients received the second time, and remaining in the house, | - | - | - | 100 |
| taken away by friends, | - | - | - | 56 |
| dead, | - | - | - | 145 |
| cured, | - | - | - | 18 |
| discharged from various causes, | - | - | - | 4 |
| | | | | <u>323</u> |

Mr. Dunstan, Master of St. Luke's Hospital, states, in his examination before the Committee of the House of Commons, that the average number of curable patients admitted annually are, and those discharged are,

| | Males | Females | Total |
|--------------|----------------------------|---------|------------|
| Males, 110 | Cured, 37 | 71 | 108 |
| Females, 153 | Uncured, | | 100 |
| | Unfit from various causes, | | 28 |
| | Dead, | | 27 |
| 263 | | | <u>263</u> |

From the above, it appears, that the proportion of males to females admitted, is nearly as 2 to 3; of females cured to males, nearly as 2 to 1*.

Bethlem Hospital, (commonly called *Bedlam*,) was appropriated by Henry VIII. to the reception of lunatics, in 1547, at the suppression of monasteries. The present building was completed in 1676. It can contain 170 curable patients on an average. Of incurables, it receives 100; fifty of each sex. A new hospital is about building. The improper practice of allowing admission to visitors, has been strictly forbidden and prevented since the year 1770. Physician, Dr. Thomas Munro.

Report of Patients in Bethlem Hospital, Dec. 31, 1809.

| | | | | | | |
|---------------------------|---|---|---|---|---|------------|
| Remaining, Dec. 31, 1808, | - | - | - | - | - | 147 |
| Admitted in 1809, | - | - | - | - | - | 103 |
| | | | | | | <hr/> 250 |
| | | | | | | <hr/> |
| Cured and discharged, | - | - | - | - | - | 97 |
| Died, | - | - | - | - | - | 10 |
| Patients, Dec. 31, 1809, | - | - | - | - | - | 143 |
| | | | | | | <hr/> 250 |
| | | | | | | <hr/> |
| Of these, men under cure, | - | - | - | - | - | 39 |
| Incurable, | - | - | - | - | - | 38 |
| | | | | | | <hr/> 77 |
| Women under cure, | - | - | - | - | - | 21 |
| Incurable, | - | - | - | - | - | 45 |
| | | | | | | <hr/> 66 |
| | | | | | | <hr/> 143† |
| | | | | | | <hr/> |

Mr. Haslam states, that from 1748, to 1794, forty-six years, there have been admitted into *Bethlem Hospital*, 4832 women, and 4042 men. Of the women, 1402 have been discharged cured; and of the men, 1155. The following is a statement of the difference of age in the patients admitted, from 1784 to 1794, ten years.

* Highmore on the Public Charities of London, p. 172.; and Ed. M. & S. J. vol. 4. p. 138.

† Highmore, p. 13. et Seq. & Literary Panorama, vol. 8. p. 870.

| Age between | No. admitted. | No. discharged cured. | No. discharged uncured. |
|-------------|---------------|--------------------------|----------------------------|
| 10 & 20 | 113 | 78 | 35 |
| 20 & 30 | 488 | 200 | 288 |
| 30 & 40 | 527 | 180 | 347 |
| 40 & 50 | 362 | 87 | 275 |
| 50 & 60 | 143 | 25 | 118 |
| 60 & 70 | 31 | 4 | 27 |
| | 1664 | 574 | 1090* |

Several other asylums and mad-houses are established in different parts of England. A system of reform on this point, and the erection of hospitals in various central parts of the kingdom, has been proposed by the Committee of the House of Commons, and it is hoped will be adopted. According to their Report, it appears that there were, in July 1807, thirty-seven lunatics confined in different jails; 1878 in houses of correction, poor-houses, &c.; and 483 in private custody; besides about 600 in the public hospitals of London; making nearly 3000 in England alone. The real number, however, is much greater†. In Scotland and Ireland, no public provision has yet been made for them.

FRANCE.

Asylum De Bicêtre. This hospital admits 200 patients. Of these the idiots constitute always one-fourth, if not more. At my last survey, says Mr. Pinel, there were 27 melancholics, 95 maniacs, 18 affected with dementia, and 60 idiots.

* Haslam, p. 245—249.

† Literary Panorama, vol. 2. p. 1259.; and Dr. Willan's Reports on the Diseases of London. He estimates the lunatics in and near London alone, at two thousand.

Maniacs admitted from 1784 to 1794, inclusive, with their respective ages.

| | Between 10 & 20 | 20 & 30 | 30 & 40 | 40 & 50 | 50 & 60 | 60 & 70 | Total. |
|---------|--------------------|---------|---------|---------|---------|---------|--------|
| In 1784 | 5 | 33 | 31 | 24 | 11 | 6 | 110 |
| 1785 | 4 | 39 | 49 | 25 | 14 | 3 | 134 |
| 1786 | 4 | 31 | 40 | 32 | 15 | 5 | 127 |
| 1787 | 12 | 39 | 41 | 26 | 17 | 7 | 142 |
| 1788 | 9 | 43 | 53 | 21 | 18 | 7 | 151 |
| 1789 | 6 | 38 | 39 | 33 | 14 | 2 | 132 |
| 1790 | 6 | 28 | 34 | 19 | 9 | 7 | 103 |
| 1791 | 9 | 26 | 32 | 16 | 7 | 3 | 93 |
| 1792 | 6 | 26 | 33 | 18 | 12 | 3 | 98 |
| 1793 | 1 | 13 | 13 | 7 | 4 | 2 | 40 |
| 1794 | 3 | 23 | 15 | 15 | 9 | 6 | 71 |
| Total. | 65 | 339 | 380 | 236 | 130 | 51 | 1201 |

The deaths in 1784, were fifty-seven: and in 1788 were ninety-five. In 1794, when the allowance of bread had been raised, they were only twenty-seven*.

Asylum De Charenton. During twenty-two months, 97 patients were admitted; and of these 14 died, and 33 were cured. Out of 71 cases, whose causes could be ascertained, 5 arose from excessive pleasure, 7 from disappointed love, 31 from domestic misfortunes, 1 from terror, 2 from suppressed discharges, 1 from excessive evacuations, and 5 from hereditary predisposition. Physician, Dr. Gastaldi†.

Asylum La Salpêtrière. Dr. Pinel, in less than four years, cured 444, out of 814 maniacs, confined in this hospital. Of 36 struck with accidental madness, 29 recovered‡.

AUSTRIA.

The general hospital at *Vienna*, was founded by Joseph II. and consists of 111 rooms. To it is attached a Lunatic Asylum, of three stories high, each 28 rooms. The shape of the latter is that of a perfectly round tower, but the elevation was probably more to gratify the Emperor's whim, than from any particular advantage resulting from such a structure.

* Pinel on Insanity, p. 32. 112. 173. & 210.

† Pinel, p. 249.

‡ Med. Repository, vol. 12. p. 294.

| | Males. | Females. |
|---------------------------------|-----------------|-----------------|
| Remaining at the end of 1804, - | 170 | 144 |
| Admitted in 1805, - - - - | 117 | 94 |
| | <hr/> 287 <hr/> | <hr/> 238 <hr/> |
| Discharged, - - - - - | 104 | 70 |
| Died, - - - - - | 42 | 32 |
| Remaining at the end of 1805, - | 141 | 136 |
| | <hr/> 287 <hr/> | <hr/> 238 <hr/> |

The proportion of males to females would probably be greater, were it not for the circumstance of the Ecclesiastics having an asylum for lunatics of their own order*.

PRUSSIA.

The principal hospital for the reception of the sick poor at Berlin, is called, "*La Maison de Charité*." It is a large building, three stories high, containing about 1200 beds, for three classes of patients, who are separated into three divisions. 1. Medical and surgical cases. 2. Lunatics. 3. Lying-in women, and their children. The celebrated *Hufeland* is superintendant of the Hospital. The following is the number of cases during four years.

| | 1801 | 1802 | 1803 | 1804 |
|---------------------|-------|-------|-------|-------|
| | <hr/> | <hr/> | <hr/> | <hr/> |
| Mental derangement, | 179 | 200 | 238 | 200 |

Under this head is placed all patients affected with mania, melancholia, and fatuitas. The proportion of men to women is as 104 to 56. Out of 334 cases, 105 were cured; and the cure is said to be owing to the external application of cold water†.

SPAIN.

According to the Rev. Mr. Townsend, the government returns of that country for 1787, gave the following list of lunatics in confinement, in the different provinces.—

Arragon, 244. Valencia, 121. Granada, 41. Leon, 2. Catalonia, 114. Andalusia, 99. Toledo, 42. Avila, 1.

No mention is made of any in the interior provinces‡.

SWITZERLAND.

There are five hospitals in and near Bern, one of which is an asylum for lunatics. Nervous diseases are very common throughout the country, and the proportional number of

* Edin. M. & S. Journal, vol. 2. p. 493. † Edin. M. & S. J. vol. 2. p. 376.

‡ Townsend's Travels in Spain, vol. 2. p. 381

epileptic and lunatic patients is much greater. Upwards of 60 were confined in this asylum, in Aug. 1805, all in separate cells, and almost all of them had dark hair and eyes; and were melancholic*.

NEW-YORK HOSPITAL AND ASYLUM.

Until the year 1808, the insane have been confined in the New-York Hospital. It is stated, on the authority of Dr. Hosack, that during a practice of ten years, as one of the physicians of that Institution, he found the disease to have arisen, in the greatest number of cases, from intemperance; and that in such, the antiphlogistic treatment was found highly useful. The lunatic asylum was opened on the 15th July, 1808. It contains sixty-four rooms, and can accommodate about 70 patients. Physician, Archibald Bruce, M. D. As there has been but one separate Report of this establishment, (for 1810,) it has, for the sake of convenience, been incorporated with those of the hospital.

| | Admitted. | | Discharged. | | | | Remaining at the end of the year. |
|------|----------------------------|---------------------------|-------------|-----------|---------------------------------|-------|-----------------------------------|
| | Remaining of former years. | Admitted during the year. | Cured. | Relieved. | Discharged from various causes. | Died. | |
| 1804 | 11 | 46 | 22 | 5 | 12 | 3 | 15 |
| 1805 | 15 | 60 | 30 | 4 | 13 | 8 | 20 |
| 1806 | 20 | 68 | 29 | | 31 | 7 | 21 |
| 1807 | 21 | 47 | 18 | 3 | 19 | 4 | 24 |
| 1808 | 24 | 66 | 16 | 10 | 16 | 4 | 44 |
| 1809 | 44 | 80 | 22 | 4 | 48 | 8 | 42 |
| 1810 | 43 | 90 | 44 | 7 | 16 | 10 | 56 |
| | 178 | 457 | 181 | 33 | 155 | 44 | 222 |

| Of 133 in the asylum, in 1810, there were | | | | | | Males. | Females. |
|---|---|---|---|---|---|--------|----------|
| | | | | | | 86 | 49 |
| Cured, | - | - | - | - | - | 35 | 9 |
| Died, | - | - | - | - | - | 7† | 3 |
| Discharged, | - | - | - | - | - | 10 | 13 |
| Remaining, Dec. 31, 1810, | - | - | - | - | - | 34 | 24 |
| | | | | | | 86 | 49 |

The above Statement is obtained from authentic documents, and partly through the politeness of Mr. Green, clerk of the New-York hospital.

* Edin. M. & S. Journal, vol. 5. p. 254.

† Of these, two died by suicide, and one a few hours after reception.

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